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SEQUENCE LISTING

Seq. ID No.1

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661 GTCGGCATCG GATC -3'

Seq. ID No.2

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661 GGTTTAGTTG GATC -3'

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Seq. ID No.3

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Seq. ID No.4

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Seq. ID No.5

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121 gccgccccgc tttcaccat gggcgctggg acggcgatga aaatgacgct cgcggtgctcg
181 attccgcgtt gccggtcggt ggtgaagtca atcagcccgt tctcacggtt cctcgcaatc
241 aactcccaac ccgggctcga aaatcgggac actgcctgcg aggagcaaat cgatcctggc
301 ctgatcgata tcgacacaga cgacatcggt gccgctatcc gcgagacagg cgcccgtgac
361 gaggcctaca tagcctga

Seq. ID No.6

1 M I A V I W S A V P T G T V D L S T I T L Y R S M Y D P M S
31 S A T E K T Y V R S A A P L S P M G V G T A M K M T S A C S
61 I P R C R S V V K S I S P F S R F L A I N S Q P G L E N R D
91 T A C E E Q I D L G L I D I D T D D I V A A I R E T G A R D
121 E A Y I A

- 45 -

Seq. ID No.7

1 gtgtcatctg ctccaaccgt gtcggtgata acgatttcgc tgaacgatct cgagggattg
61 aaaagcaccg tggagagcgt tcgcgcgcag cgctatgggg ggcgaatcga gcacatcgtc
121 atcgacgggtg gatcggggcga cgccgtcgtg gagtatctgt ccggcgatcc tggctttgca
5 181 tattggcaat ctcagcccga caacgggaga tatgacgcga tgaatcaggg cattgcccat
241 tcgtcggggcg acctgtttgtg gtttatgcac tccacggatc gtttctccga tccagatgca
301 gtcgcttccg tgggtggaggc gctctcgggg catggaccag tacgtgattt gtgggggttac
361 gggaaaaaca accttgtcgg actcgacggc aaaccacttt tccctcggcc gtacggctat
421 atgccgttta agatgcggaa atttctgctc ggcgcgacgg ttgcgcatca ggcgacattc
10 481 ttcggcgcggt cgctggtagc caagtggggc ggttacgac ttgattttgg actcgaggcg
541 gaccagctgt tcatctaccg tgccgcacta atacggcctc ccgtcacgat cgaccgcgtg
601 gtttgcgact tcgatgtcac gggacctggg tcaaccacgc ccatccgtga gcactatcgg
661 acctgcggc ggctctggga cctgcatggc gactaccgcg tgggtggggc cagagtgtcg
721 tgggcttact tgcgtgtgaa ggagtacttg attcgggccc acctggccgc attcaacgcg
15 781 gtaaagttct tgcgagcgaa gttcgccaga gttcgcgga agcaaaattc atag

Seq. ID No.8

1 V S S A P T V S V I T I S L N D L E G L K S T V E S V R A Q
31 R Y G G R I E H I V I D G G S G D A V V E Y L S G D P G F A
61 Y W Q S Q P D N G R Y D A M N Q G I A H S S G D L L W F M H
20 91 S T D R F S D P D A V A S V V E A L S G H G P V R D L W G Y
121 G K N N L V G L D G K P L F P R P Y G Y M P F K M R K F L L
151 G A T V A H Q A T F F G A S L V A K L G G Y D L D F G L E A
181 D Q L F I Y R A A L I R P P V T I D R V V C D F D V T G P G
211 S T Q P I R E H Y R T L R R L W D L H G D Y P L G G R R V S
25 241 W A Y L R V K E Y L I R A D L A A F N A V K F L R A K F A R
271 A S R K Q N S

Seq. ID No.9

1 gtgaagcgag cgcttataac agggatcacg gggcaggatg gttcctacct cgccgagcta
61 ctactgagca agggatacga gggtcacggg ctcgttcgtc gagcttcgac gtttaacacg
30 121 tcgcggatcg atcacctcta cgttgaccca caccaaccgg gcgcgcgctt gttcttgac
181 tatgcagacc tcaactgacg caccgggttg gtgacctgc tcagcagtat cgaccgggat
241 gaggtctaca acctcgcagc gcagtcccat gtgcgcgtca gctttgacga gccagtgc
301 accggagaca ccaccggcat gggatcgatc cgacttctgg aagcagtcg cctttctcgg
361 gtggactgcc ggttctatca ggcttcctcg tcggagatgt tcggcgcatc tccgccaccg
35 421 cagaacgaat cgacgcggtt ctatccccgt tcgccatacg gcgcggccaa ggtcttctcg
481 tactggacga ctcgcaacta tcgagaggcg tacggattat tcgcagtgaa tggcatcttg
541 ttcaaccatg agtcccccg gcgcggcgag actttcgtga cccgaaagat cacgcgtgcc
601 gtggcgcgca tccgagctgg cgtccaatcg gaggtctata tgggcaacct cgatgcgatc
661 cgcgactggg gctacgcgcc cgaatatgtc gaggggatgt ggaggatgtt gcaagcgcct
40 721 gaacctgatg actacgtcct ggcgacaggc cgtggttaca ccgtacgtga gttcgtcaa
781 gctgcttttg accatgtcgg gctcgactgg caaaagcgcg tcaagtttga cgaccgctat
841 ttgcgtccca ccgaggtcga ttcgctagta ggagatgccg acaaggcggc ccagtcactc
901 ggctggaaag cttcgggtca tactggtgaa ctgcgcgcga tcatggtgga cgcggacatc
961 gccgcgttgg agtgcgatgg cacaccatgg atcgacacgc cgatggtgcc tgggtggggc
45 1021 agagtaagtt ga

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Seq. ID No.10

1 VKRALITGITGQDGSYLAELLLSKGYEVHG
31 LVRRASTFNTSRIDHLYVDPHQPGARLFLH
61 YADLTDGTRLVTLSSIDPDEVYNLAAQSH
5 91 VRVSFDEP VHTGDTTGMGSI RLL EAVRLSR
121 VDCRFYQASSSEMFGASPPPNESTPFYPR
151 SPYGA AKVFSYWTTRNYREAYGLFAVNGIL
181 FNHESPRRGETFVTRK ITRAVARIRAGVQS
211 EVYMG NLD AIRDWGYAPEYVEGMWRMLQAP
10 241 EPDDYV L ATGRGYTVREF AQA AF DHVGLDW
271 QKR VKFDDRYLRPTEVDSL VG DADKAAQSL
301 GWKASVHTGELARIMVDADIAALECDGTPW
331 IDTPMLPGWGRVS

Seq. ID No.11

15 1 gtgaagcgag cgcttataac agggatcacg gggcaggatg gttcctacct cgccgagcta
61 ctactgagca agggatacga ggttcacggg ctctgttcgac gagcttcgac gtttaacacg
121 tcgcggatcg atcacctcta cgttgaccca caccaaccgg gcgcgcgctt gttcttgac
181 tatgcagacc tctactgacg caccgggttg gtgaccctgc tcagcagtat cgacccggat
241 gaggtctaca acctcgacg gcagtcctcat gtgcgcgctca gctttgacga gccagtgc
20 301 accggagaca ccaccggcat gggatcgatc cgacttctgg aagcagtcg cctttctcgg
361 gtggactgcc ggttctatca ggcttcctcg tcggagatgt tcggcgcatc tccgccaccg
421 cagaacgaat cgacgccgtt ctatccccgt tcgccatacg gcgcggccaa ggtcttctcg
481 tactggacga ctcgcaacta tcgagaggcg tacggattat tcgcagtga tggcatcttg
541 ttcaaccatg agtccccccg gcgcggcgag actttcgtga cccgaaagat cagcggtgcc
25 601 gtggcgcgca tccgagctgg cgtccaatcg gaggtctata tgggcaacct cgatgcgatc
661 cgcgactggg gctacgcgcc cgaatatgtc gaggggatgt ggaggatgtt gcaagcgctt
721 gaacctgatg actacgtcct ggcgacaggg cgtgggtaca ccgtacgtga gttcgctcaa
781 gctgcttttg accacgtcgg gctcgactgg caaaagcacg tcaagtttga cgaccgctat
841 ttgcgccccca cagaggtcga ttcgctagta ggagatgccg acagggcggc ccagtcactc
30 901 ggctggaaaag cttcggttca tactggtgaa ctgcgcgcga tcatggtgga cgcggacatc
961 gccgcgtcgg agtgcgatgg cacaccatgg atcgacacgc cgatgttgcc tggttggggc
1021 ggagtaagtt ga

Seq. ID No.12

35 1 VKRALITGITGQDGSYLAELLLSKGYEVHG
31 LVRRASTFNTSRIDHLYVDPHQPGARLFLH
61 YADLTDGTRLVTLSSIDPDEVYNLAAQSH
91 VRVSFDEP VHTGDTTGMGSI RLL EAVRLSR
121 VDCRFYQASSSEMFGASPPPNESTPFYPR
151 SPYGA AKVFSYWTTRNYREAYGLFAVNGIL
40 181 FNHESPRRGETFVTRK ITRAVARIRAGVQS
211 EVYMG NLD AIRDWGYAPEYVEGMWRMLQAP
241 EPDDYV L ATGRGYTVREF AQA AF DHVGLDW
271 QKHVKFDDRYLRPTEVDSL VG DADRAA QSL
301 GWKASVHTGELARIMVDADIAASECDGTPW
45 331 IDTPMLPGWGGVS

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Seq. ID No.13

1 gtgcgatggc acaccatgga tcgacacgcc gatgttgccct gggtggggca gagtaagttg
 61 acgactacac ctgggcctct ggaccgcgca acgcccgtgt atatcgccgg tcatcggggg
 121 ctggtcggct cagcgctcgt acgtagattt gaggccgagg ggttcaccaa tctcattgtg
 5 181 cgatcacgcg atgagattga tctgacggac cgagccgcaa cgtttgattt tgtgtctgag
 241 acaagaccac aggtgatcat cgatgcggcc gcacgggtcg gcggcatcat ggcgaataac
 301 acctatcccg cggacttctt gtccgaaaac ctccgaatcc agaccaattt gctcgacgca
 361 gctgtcgccg tgcgtgtgcc gcggtccctt ttcctcggtt cgtcatgcat ctaccgaag
 421 tacgctccgc aacctatcca cgagagtgtt ttattgactg gccctttgga gccaccaaac
 10 481 gacgcgtatg cgatcgccaa gatcgccggt atcctgcaag ttcaggcggg taggcgccaa
 541 tatgggctgg cgtggatctc tgcgatgccg actaacctct acggaccggg cgacaacttc
 601 tccccgtccg ggtcgcatct cttgccggcg ctcatccgtc gatatgagga agccaaagct
 661 ggtggtgcag aagaggtgac gaattggggg accggtactc cgcggcgcga acttctgcat
 721 gtcgacgacg tggcgagcgc atgcctgttc cttttggaac atttcgatgg tccgaaccac
 15 781 gtcaacgtgg gcaccggcgt cgatcacagc attagcgaga tcgcagacat ggtcgctaca
 841 gcggtgggct acatcggcga aacacgttgg gatccaacta aaccgatgg aaccgcgcg
 901 aaactattgg acgtctccgc gctacgcgag ttgggttggc gcccgcgat cgcactgaaa
 961 gacggcatcg atgcaacggt gtcgtggtac cgcacaaatg ccgatgccgt gaggaggtaa

Seq. ID No.14

1 V R W H T M D R H A D V A W L G Q S K L T T T P G P L D R A
 31 T P V Y I A G H R G L V G S A L V R R F E A E G F T N L I V
 61 R S R D E I D L T D R A A T F D F V S E T R P Q V I I D A A
 91 A R V G G I M A N N T Y P A D F L S E N L R I Q T N L L D A
 121 A V A V R V P R L L F L G S S C I Y P K Y A P Q P I H E S A
 25 151 L L T G P L E P T N D A Y A I A K I A G I L Q V Q A V R R Q
 181 Y G L A W I S A M P T N L Y G P G D N F S P S G S H L L P A
 211 L I R R Y E E A K A G G A E E V T N W G T G T P R R E L L H
 241 V D D L A S A C L F L L E H F D G P N H V N V G T G V D H S
 271 I S E I A D M V A T A V G Y I G E T R W D P T K P D G T P R
 30 301 K L L D V S A L R E L G W R P R I A L K D G I D A T V S W Y
 331 R T N A D A V R R

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Seq. ID No.15

1 gtgcatggc acaccatgga tcgacacgcc gatgttgccg ggttggggcg gagtaagttg
61 acgactacac ctgggcctct ggaccgcgca acgcccgtgt atatcgccgg tcatcggggg
121 ctggtcggct cagcgctcgt acgtagattt gaggcgagg ggttcaccaa tctcattgtg
5 181 cgatcacgcg atgagattga tctgacggac cgagccgcaa cgtttgattt tgtgtctgag
241 acaagaccac aggtgatcat cgatgcggcc gcacgggtcg gcggcatcat ggccaataac
301 acctatcccg cggacttctt gtccgaaaac ctccgaatcc agaccaattt gtcgacgcga
361 gctgtcgccg tgcgtgtgcc gcggctcctt ttccctcggtt cgatcatgcat ctacccgaag
421 tacgctccgc aacctatcca cgagagtgtt ttattgactg gccctttgga gccaccaaac
10 481 gacgcgtatg cgatcgccaa gatcgccggt atcctgcaag ttcaggcggt taggcgcaa
541 tatgggctgg cgtggatctc tgcgatgccg actaacctct acggaccggt cgacaacttc
601 tccccgtccg ggtcgcatct cttgccggcg ctcacccgtc gatatgagga agccaaagct
661 ggtggtgacg aagaggtgac gaattggggg accggtactc cgcggcgcgga acttctgcat
721 gtcgacgatc tggcgagcgc atgcctgttc cttttggaac atttcgatgg tccgaaccac
15 781 gtcaacgtgg gcaccggcgt cgatcacagc attagcgaga tcgcagacat ggtcgctacg
841 gcgggtgggt acatcgccga aacacgttgg gatccaacta aaccgatgg aaccccgcg
901 aaactattgg acgtctccgc gctacgcgag ttgggttggc gcccgcgaa cgactgaaa
961 gacggcatcg atgcaacggt gtcgtggtac cgcacaaatg ccgatgccgt gaggaggtaa

Seq. ID No.16

1 VRWHTMDRHADVAWLGRSKLTTPGPLDRA
31 TPVYIAGHRGLVGSALVRRFEAE GFTNLIV
61 RSRDEIDLTDRAATFDFVSETRPQVIIDA
91 ARVGGIMANNTPADFLSENLRITNL L D A
121 AVAVRVPRLLFLGSSSCIYPKYAPQPIHESA
25 151 LLTGPLEPTNDAYAI AKIAGILQVQAVRRQ
181 YGLAWISAMPTNLYGPGDNFSPSGSHLLPA
211 LIRRYEEAKAGGAEEVTNWGTGTPRREL LH
241 VDDLASACLFLEHFDGPNHVN VGTGV D H S
271 ISEIADMVATAVGYIGETRWDP TKPDGTPR
30 301 KLLDVSA LREL GW RPRIAL KDGI D A T V S W Y
331 RTNADAVRR

Seq. ID No.17

1 atggattttt tgcgcaacgc cggttgatg gtcgtaacg ttagtaccga gatgctgcgc
35 61 cacttcgaac gaaagcgctt attagtaaac caattcaaag catabggagt caacgttggt
121 attgatgtcg gtgctaactc cggccagttc ggtagcgctt tgcgtcgtgc aggatccaag
181 agccgtatcg ttccctttga acctctttcg gggccatttg cgcaactaac gcgcaagtcg
241 gcatcggtac cactatggga gtgtcaccag tatgccctag gcgacgccga tgagacgatt
301 accatcaatg tggcaggcaa tgcgggggca agtagttccg tgctgccgat gcttaaaagt
40 361 catcaagatg cctttcctcc cgcgaattat attggcaccg aagacgttgc aatacaccgc
421 cttgatccgg ttgcatcaga atttctgaac cctaccgatg ttactttcct gaagatcgac
481 gtacaggggt tcgagaagca ggttatcagc ggcagtaagt caacgcttaa cgaaagctgc
541 gtcggcatgc aactcgaaact ttcttttatt ccgttgtagc aaggtgacat gctgattcat
601 gaagcgcttg aactgtgcta ttccctaggt ttcagactga cgggtttggt gcccggttt
45 661 acggatccgc gcaatggctg aatgcttcaa gctgacggca ttttcttcg tggggacgat
721 tga

- 49 -

Seq. ID No.18

1 M D F L R N A G L M A R N V S T E M L R H F E R K R L L V N
31 Q F K A Y G V N V V I D V G A N S G Q F G S A L R R A G F K
61 S R I V S F E P L S G P F A Q L T R K S A S D P L W E C H Q
91 Y A L G D A D E T I T I N V A G N A G A S S S V L P M L K S
121 H Q D A F P P A N Y I G T E D V A I H R L D S V A S E F L N
151 P T D V T F L K I D V Q G F E K Q V I T G S K S T L N E S C
181 V G M Q L E L S F I P L Y E G D M L I H E A L E L V Y S L G
211 F R L T G L L P G F T D P R N G R M L Q A D G I F F R G D D

Seq. ID No.19

1 atggattttt tgcgcaacgc cggcttgatg gctcgtaacg ttagcaccga gatgctgcgc
61 cacttcgaac gaaagcgctt attagtaaac caattcaaag catacggagt caacgttggt
121 attgatgtcg gtgctaactc cggccagttc ggtagcgctt tgcgtcgtgc aggattcaag
181 agccgtatcg tttcctttga acctcttcg gggccatttg cgcaactaac gcgcgagtcg
241 gcatcggatc cactatggga gtgtcaccag tatgccctag gcgacgccga tgagacgatt
301 accatcaatg tggcaggcaa tgcgggggca agtagttccg tgctgccgat gcttaaaagt
361 catcaagatg cctttcctcc cgcgaattat attggcaccg aagacgttgc aatacaccgc
421 cttgattcgg ttgcatcaga atttctgaac cctaccgatg ttactttcct gaagatcgac
481 gtacaggggt tgcagaagca gggtatcgcg ggcagtaagt caacgcttaa cgaaagctgc
541 gtcggcatgc aactcgaact ttcttttatt cgttggtacg aaggtgacat gctgattcat
601 gaagcgcttg aacttgtcta ttccctaggt ttcagactga cgggtttggt gcccggttt
661 acggatccgc gcaatggtcg aatgcttcaa gctgacggca ttttcttcg tggggacgat
721 tga

Seq. ID No.20

1 M D F L R N A G L M A R N V S T E M L R H F E R K R L L V N
31 Q F K A Y G V N V V I D V G A N S G Q F G S A L R R A G F K
61 S R I V S F E P L S G P F A Q L T R E S A S D P L W E C H Q
91 Y A L G D A D E T I T I N V A G N A G A S S S V L P M L K S
121 H Q D A F P P A N Y I G T E D V A I H R L D S V A S E F L N
151 P T D V T F L K I D V Q G F E K Q V I A G S K S T L N E S C
181 V G M Q L E L S F I P L Y E G D M L I H E A L E L V Y S L G
211 F R L T G L L P G F T D P R N G R M L Q A D G I F F R G D D

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Seq. ID No.21

1 atgactgcgc cagtgttctc gataattatc cctaccttca atgcagcggg gacgctgcaa
61 gcctgcctcg gaagcatcgt cgggcagacc taccgggaag tggaagtggg ccttgtcgac
121 ggcggttcga ccgatcggac cctcgacatc gcgaacagtt tccgcccggg actcggctcg
5 181 cgactggctg ttcacagcgg gcccgatgat ggcccctacg acgccatgaa ccgcggcgctc
241 ggcgtagcca caggcgaatg ggtacttttt ttaggcgccg acgacaccct ctacgaacca
301 accacgttgg ccaggttagc cgcttttctc ggcgaccatg cggcaagcca tcttgtctat
361 ggcgatgttg tgatgcgttc gacgaaaagc cggcatgccg gacctttcga cctcgaccgc
10 421 ctctattttg agacgaattt gtgccaccaa tcgatctttt accgccgtga gcttttcgac
481 ggcatcggcc cttacaacct gcgctaccga gtctgggcgg actgggactt caatattcgc
541 tgcttctcca acccggcgct gattaccgcg tacatggacg tcgtgatttc cgaatacaac
601 gacatgaccg gcttcagcat gaggcagggg actgataaag agttcagaaa acggctgcca
661 atgtacttct ggggtgcagg gtgggagact tgcaggcgca tgctggcggt ttgaaagac
721 aaggagaatc gccgtctggc cttgcgtacg cggttgataa gggttaaggc cgtctccaaa
15 781 gaacgaagcg cagaaccgta g

Seq. ID No.22

1 M T A P V F S I I I P T F N A A V T L Q A C L G S I V G Q T
31 Y R E V E V V L V D G G S T D R T L D I A N S F R P E L G S
61 R L V V H S G P D D G P Y D A M N R G V G V A T G E W V L F
20 91 L G A D D T L Y E P T T L A Q V A A F L G D H A A S H L V Y
121 G D V V M R S T K S R H A G P F D L D R L L F E T N L C H Q
151 S I F Y R R E L F D G I G P Y N L R Y R V W A D W D F N I R
181 C F S N P A L I T R Y M D V V I S E Y N D M T G F S M R Q G
211 T D K E F R K R L P M Y F W V A G W E T C R R M L A F L K D
25 241 K E N R R L A L R T R L I R V K A V S K E R S A E P

Seq. ID No.23

1 atgactgcgc cagtgttctc gataattatc cctaccttca atgcagcggg gacgctgcaa
61 gcctgcctcg gaagcatcgt cgggcagacc taccgggaag tggaagtggg ccttgtcgac
121 ggcggttcga ccgatcggac cctcgacatc gcgaacagtt tccgcccggg actcggctcg
30 181 cgactggctg ttcacagcgg gcccgatgat ggcccctacg acgccatgaa ccgcggcgctc
241 ggcgtagcca caggcgaatg ggtacttttt ttaggcgccg acgacaccct ctacgaacca
301 accacgttgg ccaggttagc cgcttttctc ggcgaccatg cggcaagcca tcttgtctat
361 ggcgatgttg tgatgcgttc gacgaaaagc cggcatgccg gacctttcga cctcgaccgc
421 ctctattttg agacgaattt gtgccaccaa tcgatctttt accgccgtga gcttttcgac
35 481 ggcatcggcc cttacaacct gcgctaccga gtctgggcgg actgggactt caatattcgc
541 tgcttctcca acccggcgct gattaccgcg tacatggacg tcgtgatttc cgaatacaac
601 gacatgaccg gcttcagcat gaggcagggg actgataaag agttcagaaa acggctgcca
661 atgtacttct ggggtgcagg gtgggagact tgcaggcgca tgctggcggt ttgaaagac
721 aaggagaatc gccgtctggc cttgcgtacg cggttgataa gggttaaggc cgtctccaaa
40 781 gaacgaagcg cagaaccgta g

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Seq. ID No.24

1 M T A P V F S I I I P T F N A A V T L Q A C L G S I V G Q T
31 Y R E V E V V L V D G G S T D R T L D I A N S F R P E L G S
61 R L V V H S G P D D G P Y D A M N R G V G V A T G E W V L F
5 91 L G A D D T L Y E P T T L A Q V A A F L G D H A A S H L V Y
121 G D V V M R S T K S R H A G P F D L D R L L F E T N L C H Q
151 S I F Y R R E L F D G I G P Y N L R Y R V W A D W D F N I R
181 C F S N P A L I T R Y M D V V I S E Y N D M T G F S M R Q G
211 T D K E F R K R L P M Y F W V A G W E T C R R M L A F L K D
10 241 K E N R R L A L R T R L I R V K A V S K E R S A E P

Seq. ID No.25

1 gtggccagca gaagtccccca ctccgctgcg ggtggttggc taattcttgg cggctccctt
61 cttgtggtcg gcgtggcgca tccggttagga ctgccggag gtgacgacga tgctggcggtg
121 gtgcagcagc cgatcgagga tgctggcggc ggtggtgtgc tcgggcagga atcgccccca
15 181 ttgttcgaag ggccaatgcg aggcgatggc cagggagcgg cgctcgtagc cggcagccac
241 gagccggaac aacagttgag tcccgggtgc gtcgagcggg gcgaagccga tctcgtccaa
301 gatgaccaga tccgcgcgga gcaggggtgc gatgatcttg ccgacgggtg tgtcggccag
361 gccgcggtag aggacctcga tcaggtcggc ggcggtgaag tagcggactt tgaatccggc
421 gtggacggca gcgtgcccgc agccgatgag caggtgactt ttgccgtac caggtgggccc
20 481 aatgaccgcc aggttctgtt gtccccgaat ccattccagg ctgcacaggt agtcgaacgt
541 ggctgcggtg atcgacgatc cggtgacgtc gaaccgcgcg agggctcttg tgaccgggaa
601 ggctgcggcc ttgagacggt tggcggtgtt ggaggcatcg cgggcagcga tctcggcctc
661 aaccaacgtc cgcaggatct cctccggtgt ccagcggtgc gtcttggcga cttgcaacac
721 ctccggcgcg ttgcggcgca ccgtggccag cttcaaccgc cgcagcgccg cgtcaaggtc
25 781 agcagccagc ggtgccgccg aggcgggtgc caccggcttg gcagcggtgg tcatgaggcc
841 gtcccgtcgg tgggtgtgat cttgtag

Seq. ID No.26

1 V A S R S P H S A A G G W L I L G G S L L V V G V A H P V G
31 L A G G D D D A G V V Q Q P I E D A G G G G V L G Q E S P P
61 L F E G P M R G D G Q G A A L V A G S H E P E Q Q L S P G V
91 V E R G E A D L V Q D D Q I R A E Q G V D D L A D G V V G Q
121 A A V E D L D Q V G G G E V A D F E S G V D G S V P A A D E
151 Q V T F A R T R W A N D R Q V L L C P N P F Q A R Q V V E R
181 G C G D R R S G D V E P V E G L G D R E G C G L E T V G G V
35 211 G G I A G S D L G L N Q R P Q D L L R C P A L R L G D L Q H
241 L G G V A A H R G Q L Q P P Q R R V K V S S Q R C R R G R C
271 H R L G S G G H E A V P S V V L I L

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Seq. ID No.27

5
10
15
20
25
30

1 atgggctgcc tcaaaggtgg tgtcgtcgcc aatgttggtg ttccaacacc ggattatgtg
61 cgattcgcgt cccactatgg cttcgttcgc gacttctgcc acggtgcgga tccgcaatcg
121 aagggcatcg tggagaacct ctgtgggtac gctcaggacg accttgcggt gccgctgctg
181 accgaagctg cgtagccggt tgagcaggtc gacctacgtg ccctcaacgc ccaggcgcaa
241 ctatggtgct cggaggtcaa tgccacggtc cactcggaga tctgcgccgt gcccacgat
301 cgcttggttg acgagcgcac cgtcttgagg gagctgccct cgctgcggcc gacgatcggc
361 tcggggctcg tgcgcgctaa ggtcgacggc ctctcgtgca tccgttacgg ctcagctcgt
421 tactcggtgc ctcagcggct cgtcgggtgc accgtggcgg tgggtggtcga tcatggcgcc
481 ctgacctgtg tggaaacctg gaccgggtgt atcgtggcgg agcacgagct cgtcagccca
541 ggtgaggtgt ccatcctcga tgaacactac gacggaccca gaccgcacc ctcgctggtg
601 cctcgcccga aaacccaagc agagaaacga ttctgcgcac tgggaaccga agcgagcag
661 ttcctcgtcg gtgctgctgc gatcggcaac acccgactga aatccgaact cgacattctg
721 ctcggccttg gcgcgcacca cggcgaacag gctttgattg acgcgctgcg cggggcggtt
781 gcgtttcgcc ggttcgcgcg tgcgcagctg cgtcgcgacc tggccgcccg cgccggcacc
841 ccacaacccc gccccgcccg cgacgcactc gtgctcgatc tgcccaccgt cgagaccccg
901 tcgttgaggg cctacaagat caacaccacc gacgggacgg cctcatgacc accgctgcca
961 agccggtggc accgtcctcg gcggcaccgc tggctgctga ccttgacgcg gcgctgcggc
1021 ggttgaagct ggccacggtg cgcgcgaacg ccgcccaggt gttgcaagtc gccaaagcgc
1081 aacgctggac accggaggag atcctgcgga cgttggttga ggccgagatc gctgcccgcg
1141 atgcctccaa caccgccaac cgtctcaagg ccgcagcctt cccggtcacc aagaccctcg
1201 acgggttcga cgtcacgga tcgtcgatca ccgcagccac gttcgactac ctgctcgagc
1261 tggaatggat tcgggcacaa cagaacctgg cggtcattgg cccacctggt acgggcaaaa
1321 gtcacctgct catcggtgct gggcacgctg ccgtccacgc cggattcaaa gtccgctact
1381 tcaccgcccg cgacctgatc gaggtcctct acccgggcct ggccgacaac accgtcggca
1441 agatcatcga caccctgctc cgcgcggatc tggatcctt ggacgagatc ggcttcgccc
1501 cgctcgacga caccgggact caactgttgt tccggctcgt ggctgcccgc tacgagcgcc
1561 gctccctggc catcgctcgt cattggccct tcgaacaatg ggggcgattc ctgcccgcg
1621 acaccaccgc cgccagcatc ctcgatcggc tgctgcacca cgccagcatc gtcgtcacct
1681 ccggcgagtc ctaccggatg cgccacgccc accacaagaa gggagccgcc aagaattag

Seq. ID No.28

35
40

1 M G C L K G G V V A N V V V P T P D Y V R F A S H Y G F V P
31 D F C H G A D P Q S K G I V E N L C G Y A Q D D L A V P L L
61 T E A A L A G E Q V D L R A L N A Q A Q L W C A E V N A T V
91 H S E I C A V P N D R L V D E R T V L R E L P S L R P T I G
121 S G S V R R K V D G L S C I R Y G S A R Y S V P Q R L V G A
151 T V A V V V D H G A L I L L E P A T G V I V A E H E L V S P
181 G E V S I L D E H Y D G P R P A P S R G P R P K T Q A E K R
211 F C A L G T E A Q Q F L V G A A A I G N T R L K S E L D I L
241 L G L G A A H G E Q A L I D A L R R A V A F R R F R A A D V
271 R S I L A A G A G T P Q P R P A G D A L V L D L P T V E T R
301 S L E A Y K I N T T D G T A S

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Seq. ID No.29

1 M T T A A K P V A P S S A A P L A A D L D A A L R R L K L A
31 T V R R N A A E V L Q V A K T Q R W T P E E I L R T L V E A
61 E I A A R D A S N T A N R L K A A A F P V T K T L D G F D V
91 T G S S I T A A T F D Y L S S L E W I R A Q Q N L A V I G P
121 P G T G K S H L L I G C G H A A V H A G F K V R Y F T A A D
151 L I E V L Y R G L A D N T V G K I I D T L L R A D L V I L D
181 E I G F A P L D D T G T Q L L F R L V A A G Y E R R S L A I
211 A S H W P F E Q W G R F L P E H T T A A S I L D R L L H H A
241 S I V V T S G E S Y R M R H A D H K K G A A K N

Seq. ID No.30

1 gtgacgtctg ctccgaccgt ctccggtgata acgatctcgt tcaacgacct cgacggggttg
61 cagcgcacgg tgaaaagtgt gcgggcgcaa cgctaccggg gacgcatcga gcacatcgta
121 atcgacggtg gcagcggcga cgacgtggtg gcatacctgt ccgggtgtga accaggcttc
181 gcgtattggc agtccgagcc cgacggcggg cggtagcagc cgatgaacca gggcatcgcg
241 cagcgcacgg gtgatctgtt gtggttcttg cactccgccg atcgtttttc cgggcccgac
301 gtggtagccc aggcctgga ggcgctatcc ggcaaggagc cgggtgtccga attgtggggc
361 ttcgggatgg atcgtctcgt cgggctcgat cgggtgcgcg gcccgatacc tttcagcctg
421 cgcaaattcc tggccggcaa gcaggttgtt ccgcatcaag catcgttctt cggatcatcg
481 ctggtggcca agatcgggtg ctacgacctt gatttcggga tcgccgccga ccaggaattc
541 atattgcggg ccgcgtggt atgcgagccg gtcacgattc ggtgtgtgct gtgcgagttc
601 gacaccacgg gcgtcggctc gcaccgggaa ccaagcgcg tcttcggtga tctgcgccgc
661 atgggcgacc ttcacgccc ctaccgcttc gggggaaggc gaatatcaca tgcctaccta
721 cgcggccggg agttctacgc ctacaacagt cgattctggg aaaacgtctt cagcgaatg
781 tcgaaatag

Seq. ID No.31

1 M T S A P T V S V I T I S F N D L D G L Q R T V K S V R A Q
31 R Y R G R I E H I V I D G G S G D D V V A Y L S G C E P G F
61 A Y W Q S E P D G G R Y D A M N Q G I A H A S G D L L W F L
91 H S A D R F S G P D V V A Q A V E A L S G K G P V S E L W G
121 F G M D R L V G L D R V R G P I P F S L R K F L A G K Q V V
151 P H Q A S F F G S S L V A K I G G Y D L D F G I A A D Q E F
181 I L R A A L V C E P V T I R C V L C E F D T T G V G S H R E
211 P S A V F G D L R R M G D L H R R Y P F G G R R I S H A Y L
241 R G R E F Y A Y N S R F W E N V F T R M S K

- 54 -

Seq. ID No.32

1 gtgaagcgag cgctcatcac cggaatcacc ggccaggacg gctcgtatct cgccgaactg
61 ctgctggcca aggggtatga ggttcacggg ctcatccggc gcgcttcgac gttcaacacc
121 tcgcggtatcg atcacctcta cgtcgacccg caccaaccgg gcgcggggct gtttctgcac
181 tatggtgacc tgatcgacgg aaccgggttg gtgaccctgc tgagcaccat cgaacccgac
241 gaggtgtaca acctggcggc gcagtacacac gtgcgggtga gcttcgacga acccgtgcac
301 accggtgaca ccaccggcat gggatccatg cgactgctgg aagccgttcg gctctctcgg
361 gtgcactgcc gcttctatca ggcgtcctcg tcggagatgt tcggcgccctc gccgccaccg
421 cagaacgagc tgacgccgtt ctaccgcggg tcaccgtatg gcgccgccaa ggtctattcg
481 tactggggca cccgcaatta tcgcgaagcg tacggattgt tcgccgttaa cggcatcttg
541 ttcaatcacg aatcacccgg gcgcgggtgag acgttcgtga cccgaaagat caccagggcc
601 gtggcacgca tcaaggccgg tatccagtcc gaggtctata tgggcaatct ggatgcggtc
661 cgcgactggg ggtacgcgcc cgaatacgtc gaaggcatgt ggcggtatgt gcagaccgac
721 gagcccgacg acttcgtttt ggcgaccggg cgcggtttca ccgtgcgtga gttcgcgcgg
781 gccgcgttcg agcatgccgg tttggactgg cagcagtacg tgaaattcga ccaacgctat
841 ctgcggccca ccgaggtgga ttcgctgacg ggcgacgcga ccaaggctgc cgaattgctg
901 ggctggaggg cttcgggtgca cactgacgag ttggctcgga tcatggtcga cgcggacatg
961 gcggcgctgg agtgcgaaagg caagccgtgg atcgacaagc cgatgatcgc cggccggaca
1021 tga

Seq. ID No.33

1 M K R A L I T G I T G Q D G S Y L A E L L L A K G Y E V H G
31 L I R R A S T F N T S R I D H L Y V D P H Q P G A R L F L H
61 Y G D L I D G T R L V T L L S T I E P D E V Y N L A A Q S H
91 V R V S F D E P V H T G D T T G M G S M R L L E A V R L S R
121 V H C R F Y Q A S S S E M F G A S P P P Q N E L T P F Y P R
151 S P Y G A A K V Y S Y W A T R N Y R E A Y G L F A V N G I L
181 F N H E S P R R G E T F V T R K I T R A V A R I K A G I Q S
211 E V Y M G N L D A V R D W G Y A P E Y V E G M W R M L Q T D
241 E P D D F V L A T G R G F T V R E F A R A A F E H A G L D W
271 Q Q Y V K F D Q R Y L R P T E V D S L I G D A T K A A E L L
301 G W R A S V H T D E L A R I M V D A D M A A L E C E G K P W
331 I D K P M I A G R T

Seq. ID No.34

1 atgaggtggtg cccgtcgcgc tcggaacatc ttgcgtcgca acggcatcga ggtgtcgcgc
61 tactttgccg aactggactg ggaacgcaat ttcttgccg aactgcaatc gcatcgggtc
121 agtgccgtgc tcgatgtcgg ggccaattcg gggcagtacg ccaggggtct gcgcggcgcg
181 ggttcgcggg gccgcatcgt ctggttcgag ccgctgcccg ggccctttgc cgtcttcgag
241 cgcagcgccct ccacggaccc gttgtgggaa tgccggcgct gtgcgctggg cgatgtcgat
301 ggaaccatct cgatcaacgt cgcgggcaac gagggcgcca gcagttccgt cttgccgatg
361 ttgaaacgac atcaggacgc ctttccacca gccaaactac tgggcgcccc acgggtgccg
421 atacatcgac tcgattccgt ggctgcagac gttctgcggc ccaacgatat tgcgttcttg
481 aagatcgacg ttcaaggatt cgagaagcag gtgatcgcg gtggcgattc aacgggtgcac
541 gaccgatgcy tcggcatgca gctcgagctg tctttccagc cgttgtagca ggggtggcatg
601 ctcatccggg aggcgctcga tctcgtggat tcgttgggct ttacgctctc gggattgcaa
661 cccggtttca ccgacccccg caacggtcga atgctgcagg ccgatggcat cttcttcggg
721 ggcagcgatt ga

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Seq. ID No.35

1 M R L A R R A R N I L R R N G I E V S R Y F A E L D W E R N
31 F L R Q L Q S H R V S A V L D V G A N S G Q Y A R G L R G A
61 G F A G R I V S F E P L P G P F A V L Q R S A S T D P L W E
91 C R R C A L G D V D G T I S I N V A G N E G A S S S V L P M
121 L K R H Q D A F P P A N Y V G A Q R V P I H R L D S V A A D
151 V L R P N D I A F L K I D V Q G F E K Q V I A G G D S T V H
181 D R C V G M Q L E L S F Q P L Y E G G M L I R E A L D L V D
211 S L G F T L S G L Q P G F T D P R N G R M L Q A D G I F F R
241 G S D

Seq. ID No.36

1 gtgaaatcgt tgaaactcgc tcgtttcatc gcgcgtagcg ccgccttcga ggtttcgcgc
61 cgctattctg agcgagacct gaagcaccag tttgtgaagc aactcaaate gcgtcgggta
121 gatgtcgttt tcgatgtcgg cgccaactca ggacaatacg ccgccggcct ccgccgagca
181 gcatataagg gccgcattgt ctcttcgaa ccgctatccg gaccgtttac gatcttgaa
241 agcaaagcgt caacggatcc actttgggat tgccggcagc atgcgttggg cgattctgat
301 ggaacgggta cgatcaatat cgcaggaaac gccggtcaga gcagttccgt cttgcccatg
361 ctgaaaagtc atcagaacgc ttttcccccg gcaaactatg tcggtaccca agaggcgtcc
421 atacatcgac ttgattccgt ggccgagaa tttctaggca tgaacgggtg cgcttttctc
481 aaggtcgacg ttcaaggctt tgaaaagcag gtgctcgccg ggggcaaate aaccatagat
541 gaccattgag tcggcatgca actcgaactg tccttcctgc cgttgtagca aggtggcatg
601 ctcatctctg aagccctcga tctcgtgtat tccttgggct tcacgttgac gggattgctg
661 ccttgtttca ttgatgcaaa taatggtcga atgttgagg ccgacggcat ctttttccgc
721 gaggacgatt ga

Seq. ID No.37

1 M K S L K L A R F I A R S A A F E V S R R Y S E R D L K H Q
31 F V K Q L K S R R V D V V F D F T V G A N S G Q Y A A G L R
61 R A A Y K G R I V S F E P L S G P F T I L E S K A S T D P L
91 W D C R Q H A L G D S D G T V T I N I A G N A G Q S S S V L
121 P M L K S H Q N A F P P A N Y V G T Q E A S I H R L D S V A
151 P E F L G M N G V A F L K V D V Q G F E K Q V L A G G K S T
181 I D D H C V G M Q L E L S F L P L Y E G G M L I P E A L D L
211 V Y S L G F T L T G L L P C F I D A N N G R M L Q A D G I F
241 F R E D D

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Seq. ID No.38

1 atggtgcaga cgaaacgata cgccggcttg accgcagcta acacaaagaa agtcgccatg
61 gccgcaccaa tgttttcgat catcatcccc accttgaacg tggctgcggt attgcctgcc
121 tgcttcgaca gcatcgcccc tcagacctgc ggtgacttcg agctggtact ggtcgacggc
181 ggctcgacgg acgaaaccct cgacatcgcc aacattttcg cccccaacct cggcgagcgg
241 ttgatcattc atcgcgacac cgaccagggc gtctacgacg ccatgaaccg cggcggtggac
301 ctggccaccg gaacgtggtt gctctttctg ggcgcggacg acagcctgta cgaggctgac
361 accctggcgc ggggtggcgc cttcattggc gaacacgagc ccagcgatct ggtatatggc
421 gacgtgatca tgcgctcaac caatttccgc tggggtggcg ccttcgacct cgaccgtctg
481 ttgttcaagc gcaacatctg ccatcaggcg atcttctacc gcgcgggact cttcggcacc
541 atcgggtccct acaacctccg ctaccgggtc ctggccgact gggacttcaa tattcgctgc
601 ttttccaacc cagcgctcgt caccgctac atgcacgtgg tcgttgcaag ctacaacgaa
661 ttcggcgggc tcagcaatac gatcgctgac aaggagtttt tgaagcggct gccgatgtcc
721 acgagactcg gcataaggct ggtcatagtt ctggtgcgca ggtggccaaa ggtgatcagc
781 agggccatgg taatgcgcac cgtcatttct tggcggcgcc gacgttag

Seq. ID No.39

1 M V Q T K R Y A G L T A A N T K K V A M A A P M F S I I I P
31 T L N V A A V L P A C L D S I A R Q T C G D F E L V L V D G
61 G S T D E T L D I A N I F A P N L G E R L I I H R D T D Q G
91 V Y D A M N R G V D L A T G T W L L F L G A D D S L Y E A D
121 T L A R V A A F I G E H E P S D L V Y G D V I M R S T N F R
151 W G G A F D L D R L L F K R N I C H Q A I F Y R R G L F G T
181 I G P Y N L R Y R V L A D W D F N I R C F S N P A L V T R Y
211 M H V V V A S Y N E F G G L S N T I V D K E F L K R L P M S
241 T R L G I R L V I V L V R R W P K V I S R A M V M R T V I S
271 W R R R R

Seq 40:

GATGCCGTGAGGAGGTAAAGCTGC

Seq 41:

GATACGGCTCTTGAATCCTGCACG